Approved For Release 2007/01/16 : CIA-RDP78B03817A000900030021-0

TOP SECRET

PRIORITY

P 141946Z
FM NPIC

1967 NOV 14 20 31Z

[redacted]

25X1

OUT63593

AFSSO PACAF
AFSSO ACIC
AFSSO FTD
AFSSO USAFE
CNO
OPCEN

Declass Review by NGA

[redacted] 25X1

ZEM
T O P S E C R E T TTTTT [redacted] CITE NPIC 2249. 25X1
SECTION 1 OF 2
[redacted] ALSO PASS 544ARTW 25X1
SUBJECT: CAMERA INFORMATION FOR MISSION 1044-1

1. THE MISSION UTILIZED TWO PAN CAMERAS, FOUR HORIZON CAMERAS, A STELLAR CAMERA, AND AN INDEX CAMERA.

2. CAMERA DATA

A. MAIN UNITS	FORWARD	AFT	STAR HOR	PORT HOR
FOCAL LENGTHS (MM)	609.599	609.599	FWD 55.000 AFT 54.800	FWD 54.900 AFT 55.000
FILTER (WRATTEN)	23A	21	25	25
APERTURE	F3.5	F3.5	F8.0	F6.3
SLIT WIDTH (IN)	.225	.175	---	---
EXPOSURE (SEC)	1/100	1/100	---	---
FILM	3404	3404	3404	3404
RESOLUTION (L/MM)	197	194	NA	NA

B. S/I UNITS		STELLAR	INDEX
FOCAL LENGTH (MM)	PART 1	83.9581	38.3743
	PART 2	84.0742	38.2806
FILTER (WRATTEN)		NONE	21
APERTURE		F1.8	F4.5
EXPOSURE (SEC)		1.0	1/500
FILM		3401	3400
RESOLUTION (L/MM)	PART 1	----	72
	PART 2	----	75
UNIT NUMBER	PART 1	D99/122/120	
	PART 2	D104/132/131	

3. LENS DISTORTION (PIN CUSION) MM

A. MAIN UNITS	3	2	1	0	359	358	357
FWD UNIT	.001	.001	.0	.0	.0	.001	.002
AFT UNIT	.003	.001	.0	.0	.0	.002	.004

B. HORIZON CAMERAS (MM)	FWD		AFT	
	PORT	STAR	PORT	STAR
(RADIAL 10 DEGREES	.020	.010	.010	.010
20 DEGREES	.050	.030	.060	.050
(TANGENTIAL) MAX VECTOR	.010	.010	.030	.030

4. CAMERA ANGLES

		DEG.	MIN.
A. ANGLE BETWEEN PAN CAMERAS		29	44.95
B. DEPRESSION ANGLE BETWEEN HORIZON AND PAN CAMERAS	FWD STAR	15	16.0
	FWD PORT	15	0.2
	AFT STAR	15	3.1
	AFT PORT	14	50.9
C. ANGLE BETWEEN STELLAR AND INDEX CAMERAS	PART 1	90	51.2
	PART 2	89	56.3

DISTRIBUTION 7

Cy No.	Office	Action
1	File	
2	OS	
	SEC BR	
	TDS	
	CSD	
	IPD	
	PD	
	PSD	
	PSD-ICB	
	TID	
	IAD	
	PAG	
	DIAXX-4	
	SPAD	
	NSA-LO	
	DIA-AP	

Advance copy Sanitized

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GROUP 1
Excluded from automatic downgrading and declassification

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5. TIMING MARKS
FREQUENCY MARKS WILL APPEAR ON THE FILM AT A RATE OF 200 CYCLES PER SECOND.

6. IMAGE MOTION COMPENSATION DATA (CYCLE RATE (CPS), GROUND ANGULAR VELOCITY (GAV), AND PASSES WHERE USED).

REF. LEVEL NO.	REF. LEVEL CPS.	REF. LEVEL GAV.	AMPL. LEVEL NO.	AMPL. LEVEL CPS.	AMPL. LEVEL GAV.	PASSES
7	.3331	.0301	4	.0975	.0088	1D AND 3D
7	.3331	.0301	2	.1187	.0107	5D THRU 9D
6	.3465	.0313	3	.1097	.0099	16D
7	.3331	.0301	3	.1097	.0099	20D THRU 44D, AND 69D THRU 74D
8	.3184	.0287	2	.1187	.0107	47D THRU 68D, AND 79D THRU 87D

7. PROGRAM TIME DATA

PASS	CAMERA ON TIME (ZULU TIME) DAY	HR	MIN	SEC	PROGRAM ON TIME UP RAMP SEC	PROGRAM DURATION SEC
1D	2	23	0	12	1243	33
3D	3	01	57	04	1079	32
5D	3	05	05	44	1385	51
6D1	3	06	35	39	1332	35
6D2	3	06	40	22	1614	75
7D	3	08	03	53	1202	41
8D1	3	09	33	52	1183	104
8D2	3	09	58	49	2680	35
9AE	3	10	42	30	-117	46
9D1	3	11	08	21	1433	133
9D2	3	11	14	17	1788	70
16D	3	21	41	34	1494	37
20D	4	03	38	27	1208	34
21D1	4	05	05	07	979	300
21D2	4	05	11	49	1381	101
21D3	4	05	14	25	1537	23
22D1	4	06	36	57	1060	76
22D2	4	06	43	19	1443	151
23D1	4	08	11	40	1316	32
23D2	4	08	14	06	1461	104
24D	4	09	40	26	1214	134
25D	4	11	16	32	1554	69
26D	4	12	45	30	1458	120
29D	4	17	26	35	2049	34
35D	5	02	12	36	1053	82
36D	5	03	47	05	1296	100
37D	5	05	17	12	1277	355
38D1	5	06	45	44	1163	58
38D2	5	06	49	14	1373	70
38D3	5	06	51	33	1513	140
39D1	5	08	19	33	1366	43
39D2	5	08	20	47	1440	24
40D	5	09	47	02	1190	227
41D1	5	11	24	12	1594	161
41D2	5	11	32	14	2077	129
42D	5	12	53	21	1519	114
43D	5	14	28	56	1829	47
44D	5	16	04	47	2210	123
47D	5	20	26	58	1668	22
52D1	6	03	55	43	1475	64
52D2	6	04	08	27	2239	195
53D1	6	05	20	37	1144	75

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53D2	6	05	23	09	1297	76
53D3	6	05	26	42	1509	339
53D4	6	05	37	30	2157	35
54D1	6	06	53	52	1317	80
54D2	6	06	57	27	1532	50
54D3	6	07	00	44	1729	38
55D	6	08	25	31	1391	37
56D1	6	09	54	27	1310	62
56D2	6	10	04	33	1916	129
58D	6	13	00	45	1639	106
60D1	6	16	11	42	2250	80
60D2	6	16	15	03	2452	39
61D1	6	17	38	13	2020	47
61D2	6	17	42	54	2301	46
63D	6	20	32	37	1638	37
68D	7	04	03	08	1560	69
69D1	7	05	27	38	1154	155
69D2	7	05	52	23	2639	60
70D1	7	07	03	51	1505	85
70D2	7	07	05	44	1619	242
71D1	7	08	30	45	1299	49
71D2	7	08	32	01	1374	145
72D1	7	10	00	24	1257	134
72D2	7	10	03	08	1420	58
72D3	7	10	11	15	1907	141
72D4	7	10	17	45	2298	27
73D	7	11	32	28	1360	97
74D	7	13	12	51	1961	79
79D	7	20	39	46	1675	37
84D	8	04	06	51	1400	81
85D1	8	05	36	18	1347	244
85D2	8	05	44	25	1834	122
86D1	8	07	05	28	1279	61
86D2	8	07	13	05	1735	70
87D1	8	08	35	34	1266	124
87D2	8	08	38	20	1432	40
87D3	8	08	39	42	1513	31

NOTE: ABOVE DATA APPLIES TO FWD UNIT ONLY. ADD 12 SECONDS TO OBTAIN START TIMES OF AFT.

8. TIME CORRELATION (MILLISECONDS)

PASS	CLOCK TIME	SYSTEM TIME	DIFFERENCE
8D	244777.759	32884.4935	--------
16D	289830.575	77937.3003	.009
24D	331605.402	33312.1184	.009
32D	376721.557	78428.2634	.010
40D	418522.228	33828.9248	.010
47D	458119.999	73426.6864	.009
56D	505313.748	34220.4238	.012
63D	8072.148	73849.7258	.009
72D	55275.122	34652.6874	.012
79D	94879.474	74257.0287	.011
88D	142053.049	35030.5907	.013

NOTE: ALL "DIFFERENCE" VALUES ARE PLUS.

GP-1

T O P S E C R E T

END OF MESSAGE

S/C NOTE: ALSO PASSED TO [redacted]

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